

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض عمومی و مشترک							
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	BK	GNRAL	PEDCO	000	EL	SP	0012	D03

طرح نگهداشت و افزایش تولید 27 مخزن

SPECIFICATION FOR CAPACITOR BANK

نگهداشت و افزایش تولید میدان نفتی بینک

Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval
D03	Feb. 2022	AFD	H.Shakiba	M.Fakharian	M.Mehrshad	
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Class: 2

CLIENT Doc. Number: F0Z-707216

Status:

IDC: Inter-Discipline Check
IFC: Issued For Comment
IFA: Issued For Approval
AFD: Approved For Design
AFC: Approved For Construction
AFP: Approved For Purchase
AFQ: Approved For Quotation
IFI: Issued For Information
AB-R: As-Built for CLIENT Review
AB-A: As-Built –Approved

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REVISION RECORD SHEET

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1.0 INTRODUCTION

Binak oilfield in Bushehr province is a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city.

With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields CLIENT (NISOC)
PROJECT:	Binak Oilfield Development – General Facilities
EPD/EPC CONTRACTOR (GC):	Petro Iran Development Company (PEDCO)
EPC CONTRACTOR:	Joint Venture of : Hirgan Energy – Design & Inspection(D&I) Companies
VENDOR:	The firm or person who will fabricate the equipment or material.
EXECUTOR:	Executor is the party which carries out all or part of construction and/or commissioning for the project.
THIRD PARTY INSPECTOR (TPI):	The firm appointed by EPD/EPC CONTRACTOR(GC) and approved by COMPANY (in writing) for the inspection of goods.
SHALL:	Is used where a provision is mandatory.
SHOULD:	Is used where a provision is advisory only.
WILL:	Is normally used in connection with the action by COMPANY rather than by an EPC/EPD CONTRACTOR, supplier or VENDOR.
MAY:	Is used where a provision is completely discretionary.

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2.0 SCOPE

This document gives amendment and supplement to IPS-M-EL-181 (2) “Materials and Equipment Standard for Power factor Improvement Capacitor” used in “Binak Oilfield Development”.

3.0 NORMATIVE REFERENCES

3.1 Local Codes & Standards

No amendments or supplements are to state.

3.2 International Codes & Standards

No amendments or supplements are to state.

3.3 The Project Documents

BK-GNRAL-PEDCO-000-EL-DC-0001

Electrical System Design Criteria

3.4 Environmental Data

The installation site is in south of Iran with corrosive, hot and medium humid atmosphere. Therefore, all equipment shall be designed to fully comply with the performance specification in the environmental conditions. For more information refer to “Process Basis Design; section 11”.

For the Ambient Conditions, Special Care should be paid to:

- Enclosures of Equipment for Outdoor Installation
- Painting and Coating of Metal Parts to Resist to the Severe Environmental Conditions

Any environmental derating factors shall be considered by vendor before design.

3.5 Guidance for Use of This Document

The amendments/supplement to the related IPS Standard(s) given in this document are directly related to the equivalent sections or clauses in the IPS Standard(s). For clarity, the section and paragraph numbering of the IPS Standard(s) has been used as long as possible. Where clauses in IPS are referenced within this document, it shall mean those clauses are amended by this document. Clauses in “IPS” that are not amended by this document shall remain valid as written.

For ease of reference, the clause or section numbering of the related IPS Standard(s) has been used throughout this specification. For the purpose of this specification, the following definitions shall hold:

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Sub. (Substitution): The IPS Std. clause is deleted and replaced by a new clause.

Del. (Deletion): The IPS Std. clause is deleted without any replacement.

Add. (Addition): A new clause with a new number is added.

Mod. (Modification): Part of the IPS Std. clause is modified, and/or a new description and/or condition are added to that Clause.

3.6 Order of Precedence

In case of conflict between requirements specified herein & the requirements of any other referenced document, the most approved stringent requirements of below listed items shall be considered based on the approval given by the owner's representative:

- Purchase order
- Material Requisition
- MTO & Data Sheet
- This Specification
- Drawing & Other Specification
- Reference Project Specification
- Iranian Petroleum Standard (IPS)
- Reference international Code & Standards

When the term “Authorized”, Authorization”, “Approval”, or “Approved” are used in this specification, it shall mean authorization or Approval from OWNER.

In case of any conflict between the project documents, the most stringent one shall be considered.

4.0 UNITS

No amendments or supplements are to state.

5.0 SERVICE CONDITION

5.2 The maximum and minimum ambient air temperature, relative humidity and the elevation of the location in which the capacitor bank will be installed shall be accordance with para. 3.4 of this document. (Mod)

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6.0 APPLICATION

6.3 Where the calculated system power factor at the LV & MV side is less than 90% lagging, capacitor bank/s shall be installed. The capacitor bank/s shall be sized to improve the system power factor to 95% lagging at system full load. (Mod)

7.0 CONSTRUCTION REQUIREMENT

7.1.3 Unless otherwise specified in data sheet, the degree of protection of indoor enclosure shall be IP 42 and that of outdoor enclosure shall be IP 54 according to IEC 60529 without using the floor as part of the enclosure. Outdoor enclosure shall be provided with sloping sunshade. (Mod)

7.1.9 The assembly shall be free standing having access from front, indoor type and provided with a power entrance compartment. The incoming cable shall enter the power compartment from below. (Add)

8.0 TEST & INSPECTION

No amendments or supplements are to state.

9.0 SPARE PARTS

No amendments or supplements are to state.

10.0 DOCUMENTATION

No amendments or supplements are to state.

11.0 SHIPMENT

No amendments or supplements are to state.

12.0 GUARANTEE

No amendments or supplements are to state.